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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/473,963	12/29/1999	KOICHI SANO	P341-9013	1678
7590	11/21/2003		EXAMINER	LONSBERRY, HUNTER B
Arent Fox Kintner Plotkin & Kahn PLLC 1050 Connecticut Avenue N W Suite 600 Washington, DC 20036-5339			ART UNIT	PAPER NUMBER
			2611	
DATE MAILED: 11/21/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/473,963	SANO ET AL.
Examiner	Art Unit	
Hunter B. Lonsberry	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 September 2003.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 September 2000 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Response to Arguments***

Applicant's arguments filed 9/30/2003 have been fully considered but they are not persuasive.

1) Applicant argues the feature of "sharing said semiconductor memory as bus masters" and points to support within the specification to overcome the 35 U.S.C. 112 rejection.

Regarding applicant's argument 1, no mention the term, "bus master" in the specification. As best understood, by the examiner, any device that accesses memory is by definition a bus master. See response to argument two, regarding bus masters.

2) Applicant argues, "Kikuchi does not teach or suggest an information processor, as recited in claims 1 and 3. In particular, Kikuchi does not teach or suggest an information processor that can handle hardware resources and which is configured by a driver program and driver data." "It is submitted that the information processor hardware driver is not for interpreting the input from the external interface such as a mouse trackball etc, but for efficiently using the hardware resources inside the processor such as graphics processor, sound processor DMA controller and the like." "The graphic processor and the audio processor shown in Kikuchi are connected to the common bus. As a result, there is no disclosure of using bus masters." (Response page 5)

Regarding applicant's argument 2, Kikuchi discloses that bus 2, is an address bus, a data bus and a control bus (Column 5, lines 34-37), that "CPU 1 controls image

processing, audio processing, and internal processing operation based on commands entered into the controller 22 by the game player. In the image processing operation, two-or three-dimensional coordinate data and viewpoint position data are supplied to the graphic data generating processor 3, and graphic commands, including address data in the display area of the buffer 11, determined by the graphic data generating processor and luminance data are issued. In the audio processing operation, an audio output command is issued to the audio processor 13..." (Column 9, line 5-17).

Additionally, Kikuchi discloses that CPU 1 performs a number of functions in Figure 2, including "Graphic command issuing means 1g" (Figure 2, column 9, lines 19-37), Figure 6, Column 11, line 63-column 14, line 29). Kikuchi inherently uses an "information processor hardware driver" as the information processor (which the examiner equates to the CPU 1 of Kikuchi, see Kikuchi, Figure 1) requires the use of some stored executable code to read and interpret the input from controller 22 or interface 4, which Kikuchi discloses may be a mouse or track ball (see above), otherwise the user would be unable to interact with the disclosed video game system of Kikuchi because the information processor would be unable to interpret any input. As Kikuchi's CPU directs commands to the Graphics processor and supplies it with data, it clearly handles hardware resources and acts as an information processor, and controls the other devices access to data.

3) Applicant argues, "Furthermore, the application software engine in the application is neither suggested nor disclosed in Kikuchi. Kikuchi merely discloses a

software contents portion, which is not the same as the application software engine of the present invention." (Response page 6)

Regarding applicants argument 3, Kikuchi discloses in Figure 6, a number of steps/commands issued by Kikuchi's operating system which is run by CPU, and stored in ROM 6, in addition the game engine itself is read from program data stored on recording medium 30 and transferred into main memory 5 for manipulation by the CPU and audio/video processors, (column 11, line 53-column 12, line 10). Claim 1 merely requires that the application software contents data is a set of data handled by the software contents program or software engine. As, Kikuchi's operating system handles the video game software read from recording medium 30, Kikuchi's video game software is clearly application software, which is handled by an operating system (software engine).

4) Applicant argues the filing date of the Eliat reference.

Regarding applicant's argument 4, the applicant is correct regarding the filing date of the Eliat reference, the newly cited Golden Tee Golf webpage, with a publication date of 7/12/1998 ([http://web.archive.org/web/\\*http://www.itsgames.com/](http://web.archive.org/web/*http://www.itsgames.com/)) has been substituted for it.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2 and 4 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, the newly added limitation of "...sharing said semiconductor memory as bus masters;" (claim 2, line 6, claim 4, line 6) is not supported in the specification.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,227,973-B1 to Kikuchi.

Regarding claim 1, Kikuchi discloses in Figure 1, a video game system which outputs video and audio signals to a home TV set with the system comprised of: a man-machine interface (controller 22, interface 4, column 6, lines 24-26), a semi conductor memory (ROM 6), and an information processor (CPU 1). The man-machine interface converts input from buttons pressed on controller 22 or input on interface 4 into electrical signals, ROM 6 stores the operating system used to direct CPU 1 and

administer resources and interrupt control (column 6, lines 26-29), a man-machine interface driver 1a (column 9, lines 23- 24) to efficiently deliver electrical signals from the man-machine interface to the application software being run by the CPU 1, application software engine read from recording medium 30 (column 8, lines 50-56) for instructing the CPU to perform a number of tasks and subroutines, the application software program includes data which is handled by the CPU and application software (column 8, lines 54-56, column 9, lines 2-7), and the CPU performs operations based upon audio and video data from the application software as well as input from the controller (column 9, lines 2-18). Kikuchi inherently uses an "information processor hardware driver" as the information processor (which the examiner equates to the CPU 1 of Kikuchi, see Kikuchi, Figure 1) requires the use of some stored executable code to read and interpret the input from controller 22 or interface 4, which Kikuchi discloses may be a mouse or track ball (see above), otherwise the user would be unable to interact with the disclosed video game system of Kikuchi because the information processor would be unable to interpret any input. Kikuchi does not disclose the use of a single semiconductor memory coupled to the CPU but instead stores the operating system in a ROM 6 and reads application software from a main memory 5 (column 9, lines 2-5). Additionally, Kikuchi discloses that when the video game system is used for business use then all of the components disclosed in Figure 1, which includes the semiconductor memory containing the application software as well as ROM 6 on which the operating system is stored (column 5, lines 54-62, column 8, lines 15-25) may be encased in a single housing. The examiner takes official notice that it is well known in

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the art to store application software, drivers, and operating system on the same memory device (for example: a personal computer hard drive). Therefore it would have been obvious to one skilled in the art, at the time of invention to modify Kikuchi to store the application software, drivers, and operating system on a semiconductor memory to reduce the complexity of the device and reduce loading times, as all the software would be stored in the same memory.

Regarding claim 2, Kikuchi discloses in Figure 1 a video game system with a CPU 1, a graphics processor 10, and audio processor 13: CPU 1, audio processor 13 and graphic processor 10 all share Main Memory 5 (column 8, lines 64-column 9, line 5), the CPU 1 controls graphics processor 10 and audio processor 13 based on electrical signals generated by a player on controller 22 (column 9, lines 5-8) and application software (column 8, lines 50-54), the graphics processor has the ability to generate image information (column 8, lines 54-63), and the sound processor has the ability to generate sound information (column 7, line 66-column 9, line 14).

Regarding claim 3, Kikuchi discloses in Figure 1, a video game system which outputs video and audio signals to a home TV set comprised of: a man-machine interface (controller 22, interface 4, column 6, lines 24-26), a semi conductor memory (ROM 6), and an information processor (CPU 1). The man-machine interface converts input from buttons pressed on controller 22 or input on interface 4 into electrical signals, ROM 6 stores the operating system used to direct CPU 1 and administer resources and interrupt control (column 6, lines 26-29), a man-machine interface driver 1a(column 9, lines 23- 24) to efficiently deliver electrical signals from the man-machine interface to

the application software being run by the CPU 1, application software engine read from recording medium 30 (column 8, lines 50-56) for instructing the CPU to perform a number of tasks and subroutines including scripts (Figures 6-8, column 11, lines 53-62), the application software program includes data which is handled by the CPU and application software (column 8, lines 54-56, column 9, lines 2-7), and the CPU performs operations based upon audio and video data from the application software as well as input from the controller (column 9, lines 2-18), these inputs are used to execute tasks as defined in scripts stored in ROM 6 (Figures 6-8, column 11, lines 53-62. The application software utilizes and executes the script language code to configure the software application code and runs on the CPU (column 11, line 63-column 12, line 10). Kikuchi's system inherently contains an "information processor hardware driver" for controlling and allocating hardware resources within the system as drivers are required to operate the hardware within the device since they act like a translator between the device and programs that use the device and thus are essential for device operation.

Regarding claim 4, Kikuchi discloses a television game device, in Figure 1, which contains a CPU 1, graphics processor 10, and audio processor 13, all of which share main memory 5, the CPU 1 controlling graphics processor 10 and audio processor 13 based upon electrical signal received from controller 22 and program code from memories 5, 6 (column 8, line 47-column 9 line 18). The graphics processor has the ability to generate image information (column 8, lines 54-63), and the sound processor has the ability to generate sound information (column 7, line 66-column 9, line 14).

Regarding claim 7, Kikuchi discloses that the video game system composed of a man-machine interface 22, semiconductor memory 5, 6, and CPU 1 are incorporated in a single apparatus (column 5, lines 34-62).

Regarding claim 8, Kikuchi discloses that the video game system composed of a man-machine interface 22, semiconductor memory 5, 6, and CPU 1 are incorporated in a single apparatus (column 5, lines 34-62).

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,227,973-B1 to Kikuchi in view of The Golden Tee Golf Video game.

Regarding claim 5, Kikuchi discloses a video game system in which CPU 1 performs operations based upon audio and video data from the application software as well as input from the controller (column 9, lines 2-18), these inputs are used to execute tasks as defined in scripts stored in ROM 6 (Figures 6-8, column 11, lines 53-62). Kikuchi does not disclose the use of a general communications line capable of transmitting and receiving data and or a program through a general communications line or having the CPU perform an operation based upon data and or a program obtained through the communications line. The Golden Tee Golf video game is an arcade machine which includes a modem within its cabinet that an operator connects to a phone line, this enables a local user to enter a national tournament, periodically, the arcade machine connects to a national computer database to upload results from games played locally on that arcade machine, and downloads the current tournament leader information which is displayed during an attract mode, additional information

announcing a new tournament is downloaded to the video game machine and displayed on the LED message display (entire document). Therefore it would have been obvious to one skilled in the art at the time of invention to modify Kikuchi to include the modem and communications line of Golden Tee Golf to provide additional data to the CPU to allow a user to play a game with other users, any enjoy a competition with players who are not local to the user.

Regarding claim 6, Kikuchi discloses a video game system in which CPU 1 performs operations based upon audio and video data from the application software as well as input from the controller (column 9, lines 2-18), these inputs are used to execute tasks as defined in scripts stored in ROM 6 (Figures 6-8, column 11, lines 53-62). Kikuchi does not disclose the use of a general communications line capable of transmitting and receiving data and or a program through a general communications line or having the CPU perform an operation based upon data and or a program obtained through the communications line. The Golden Tee Golf video game is an arcade machine which includes a modem within its cabinet that an operator connects to a phone line, this enables a local user to enter a national tournament, periodically, the arcade machine connects to a national computer database to upload results from games played locally on that arcade machine, and downloads the current tournament leader information which is displayed during an attract mode, additional information announcing a new tournament is downloaded to the video game machine and displayed on the LED message display (entire document). Therefore it would have been obvious to one skilled in the art at the time of invention to modify Kikuchi to include the modem

and communications line of Golden Tee Golf to provide additional data to the CPU to allow a user to play a game with other users, any enjoy a competition with players who are not local to the user.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,634,848 to Tsuda: Video Game System.

U.S. Patent 5,532,923 to Sone: Karaoke Network System Serving Spare Events During Idling Time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 703-305-3234. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-308-5359.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

HBL



VIVEK SRIVASTAVA  
PRIMARY EXAMINER